

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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Early CPAP versus surfactant in extremely preterm infants. N Engl J Med 2010;362:1970-9.
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Web Appendix Tables

Table A1. Pre-Specified Outcomes for 24 to 25 week Stratum

Characteristic	CPAP (N=285)	Surfactant (N=280)	Relative Risk or Difference in Means for CPAP vs. Surfactant (95% CI)	Adjusted P- value
BPD (physiologic definition) or death by 36 weeks PMA	63.9% (182/285)	67.9% (190/280)	0.96 (0.85, 1.07)	0.45
BPD (supplemental oxygen) or death by 36 weeks PMA	62.8% (179/285)	67.1% (188/280)	0.95 (0.84, 1.06)	0.36
BPD (physiologic definition) by 36 weeks PMA	54.8% (125/228)	54.5% (108/198)	1.06 (0.91, 1.25)	0.46
BPD (supplemental oxygen) by 36 weeks PMA	53.5% (122/228)	53.5% (106/198)	1.05 (0.9, 1.23)	0.53
Death by 36 weeks PMA	20.0% (57/285)	29.3% (82/280)	0.68 (0.5, 0.92)	0.01
Days on supplemental oxygen† Adjusted Mean±StdErr,	80.8 ± 2.3	80.3 ± 2.4	0.5 (-5.8, 6.9)	0.86
Unadjusted Median (IQR) (N=421)	79.5 (51.5, 108.5)	79 (52, 110)		
Days on mechanical vent (HFV & CV) † Adjusted	35.8 ± 1.5	38.7 ± 1.6	-3.0 (-7.2, 1.3)	0.17
Mean±StdErr, Unadjusted Median (IQR) (N=421)	29.5 (10, 48)	33 (14, 56)		
Alive and off MV (HFV/CV) at 7 days	34.3% (97/283)	26.4% (74/280)	1.29 (1, 1.66)	0.049
Any air leak in first 14 days	8.1% (23/285)	9.6% (27/280)	0.79 (0.47, 1.35)	0.40
Medical or surgical NEC	15.1% (42/279)	13.1% (35/268)	1.13 (0.74, 1.71)	0.58
IVH grade 3-4	19.8% (54/273)	17.0% (45/265)	1.17 (0.82, 1.68)	0.39
Postnatal steroids for BPD	13.0% (36/276)	20.5% (54/264)	0.66 (0.46, 0.94)	0.02

† Among survivors to discharge, transfer or 120 days; maximum value is 120 days

Table A2. Cause of Death for 24 to 25 week stratum

Contributory Cause of Death	CPAP (N=68)	Surfactant (N=90)
Respiratory distress syndrome	13/68 (19.1)	31/90 (34.4)
Bronchopulmonary dysplasia	10/68 (14.7)	7/90 (7.8)
Infection	14/68 (20.6)	15/90 (16.7)
Necrotizing enterocolitis	10/68 (14.7)	16/90 (17.8)
Central nervous center insult	11/68 (16.2)	5/90 (5.6)
Immaturity	3/68 (4.4)	5/90 (5.6)
Other	7/68 (10.3)	11/90 (12.2)

Table A3. Pre-Specified Outcomes for 26 to 27 week Stratum

Characteristic	CPAP (N=378)	Surfactant (N=373)	Relative Risk or Difference in Means for CPAP vs. Surfactant (95% CI)	Adjusted P-value
BPD (physiologic definition) or death by 36 weeks PMA	35.7% (135/378)	38.3% (143/373)	0.94 (0.78, 1.13)	0.48
BPD (supplemental oxygen) or death by 36 weeks PMA	38.1% (144/378)	44.2% (165/373)	0.87 (0.74, 1.03)	0.12
BPD (physiologic definition) by 36 weeks PMA	28.7% (98/341)	32.6% (111/341)	0.92 (0.74, 1.15)	0.46
BPD (supplemental oxygen) by 36 weeks PMA	31.4% (107/341)	39.0% (133/341)	0.84 (0.69, 1.02)	0.08
Death by 36 weeks PMA	9.8% (37/378)	8.6% (32/373)	1.12 (0.72, 1.75)	0.61
Days on mechanical vent (HFV & CV) [†] Adjusted Mean±StdErr, Unadjusted Median (IQR) (N=677)	13.7 ± 1.3 4 (0, 15)	16.7 ± 1.3 6 (2, 21)	-3.0 (-6.4, 0.4)	0.08
Alive and off MV (HFV/CV) at 7 days	71.2% (265/372)	65.6% (244/372)	1.09 (0.98, 1.2)	0.10
Any air leak in first 14 days	5.8% (22/378)	5.6% (21/373)	1.01 (0.57, 1.81)	0.97
Medical or surgical NEC	10.9% (41/375)	7.6% (28/368)	1.42 (0.9, 2.25)	0.14
IVH grade 3-4	10.3% (38/369)	7.4% (27/363)	1.41 (0.86, 2.3)	0.17
Postnatal steroids for BPD	2.9% (11/373)	7.9% (29/367)	0.4 (0.2, 0.78)	0.008

[†] Among survivors to discharge, transfer or 120 days; maximum value is 120 days